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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/727,898	12/01/2000	Thomas William Birdwell	13DV13419	13DV13419 3672	
6111 7	6111 7590 01/12/2006			EXAMINER	
GENERAL ELECTRIC COMPANY ANDREW C HESS GE AIRCRAFT ENGINES ONE NEUMANN WAY M/D H17 CINCINNATI, OH 452156301			LU, KUEN S		
			ART UNIT	PAPER NUMBER	
			2167		
			DATE MAILED: 01/12/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/727,898	BIRDWELL ET AL.				
Office Action Summary	Examiner	Art Unit				
	Kuen S. Lu	2167				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period was realized to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  B6(a). In no event, however, may a reply be time  rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
,	Responsive to communication(s) filed on <u>25 October 2005</u> .					
<i>,</i>						
	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-7 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) 1-7 is/are rejected.	•					
7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	r election requirement					
of Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>01 December 2000</u> is/are: a)⊠ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ul>		atent Application (PTO-152)				

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### **DETAILED ACTION**

## Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 26, 2005 has been entered.

# Response to Amendments

- 1. The Action is responsive to the Applicant's Amendments, filed on May 16, 2005.
- 2. The Applicant's newly presented claims 2-7 are noted. Also noted is the Applicant's amendments made to the independent claim 1, wherein new issue was raised when the limitation "converting existing NDE test data to the standard data format" was amended to "converting existing NDE test data including a plurality of different formats into the standard data format". In order to address the new issue, the Examiner has introduced a new reference in the Office Action for Final Rejection (hereafter "the Action") as shown next.
- 3. Concerning the Applicant's Remarks on claim rejections, filed on May 16, 2005, has been fully considered by the Examiner. Please see discussion in the section *Response* to *Arguments*, following the Action.

Claim Rejections - 35 USC § 103

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35

U.S.C. 103(a).

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura

(U.S. Application 2002/0013857) in view of Koch et al. (U.S. Patent 5,628,319, hereafter

"Koch").

As per claim 1, Kitamura teaches the following for managing data:

"providing a predetermined standard data format" for data (See Page 1, [0004] where supplied image data to a computer capture board is converted to a predetermined data format is equivalent to Applicant's providing a predetermined standard data format for data);

Kitamura does not teach the predetermined standard data format is specifically for NDE test data.

However, Koch teaches non-destructive testing data receiving, conversion and transmission (See Figs. 1-2 and col. 5, line 48 – col. 6, line14).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Koch with Kitamura reference because both references are dedicated to data conversion, and the combined teaching would have allowed Kitamura's system to utilize Koch's teaching on precision determination of the maximum signal amplitude and its timing, to further enhance its ability to maintain desired accuracy and precision for concerting and transmitting image data across the network where a variety of image data is now frequently transmitted on network.

The combined teaching of the Koch and Kitamura references further teaches the following:

"converting existing NDE test data including a plurality of different formats into the standard data format, wherein the plurality of different data formats comprise image data and non-image data" (See Kitamura: Page 1, [0004] where supplied image data to a computer capture board is converted to a predetermined data format, and Koch: Figs. 1-2 and col. 5, line 48 – col. 6, line14 wherein non-destructive testing data is converted); "adding the converted NDE test data to a computer database associated with a computer network" (See Koch: Figs. 1-2 and col. 5, line 48 – col. 6, line14 wherein non-destructive testing data is received, converted and transmitted, and Kitamura: Page 1, [0004] where captured image data is temporary stored in the internal storage device and can be transmitted to other computer through the network is equivalent to Applicant's adding the converted NDE test data to a computer database associated with a computer network); and

"transmitting the converted data over the network" (See Kitamura: Page 1, [0004] where supplied image data to a computer capture board is converted to a predetermined data format for transmitting over network).

**6.** Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura (U.S. Application 2002/0013857) in view of Koch et al. (U.S. Patent 5,628,319, hereafter "Koch") as applied to claim 1 above, and further in view of Hosack et al. (U.S. Patent 6,511,426, hereafter "Hossack").

As per claim 2, the combined teaching of Koch and Kitamura references does not explicitly teach "the plurality of different data formats comprise at least one of a TVF format, an ASCII format, and an VDE format".

However, Hossack teaches "the plurality of different data formats comprise at least one of a TVF format, an ASCII format, and an VDE format" (See Hossack: col. 9, lines 15-30 wherein Hossack's TIFF format is introduced to display video image data frames is equivalent to Applicant's the plurality of different data formats comprise at least one of a TVF format, an ASCII format, and an VDE format).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Hossack with the Koch and Kitamura references because the references are dedicated to non-destructive testing, testing process, testing data conversion, and testing data collection and display, the

combined teaching of the references would have enabled a non-destructive testing system capable of achieving required accuracy.

As per claim 3, the combined teaching of Hossack, Koch and Kitamura references further teaches "the standard data format is based at least in part on a Digital Image Communication in Medicine (DICOM) format" (See Hossack: col. 9, lines 15-30 wherein Hossack's video image data frames are exported into DICOM format is equivalent to Applicant's the standard data format is based at least in part on a Digital Image Communication in Medicine, DICOM format).

As per claim 4, the combined teaching of Hossack, Koch and Kitamura references further teaches "the converted NDE test data to a computer database comprises storing images on the computer database" (See Kitamura: Page 1, [0004] where captured image data is temporary stored in the internal storage device, and Koch: Figs. 1-2 and col. 5, line 48 – col. 6, line14 wherein non-destructive testing data is received, converted and transmitted, and Hossack: Fig. 1 and col. 15, lines 40-45 wherein device is provided to store images, is equivalent to Applicant's the converted NDE test data to a computer database comprises storing images on the computer database).

As per claim 5, the combined teaching of Hossack, Koch and Kitamura references further teaches "transmitting the converted data over the network comprises transmitting images over the network" (See Hossack: Fig. 17, col. 41, lines 26-30 and col. 42, lines

9-18 wherein Hossack's teaching on DICOM standard for storing and transmitting images on network is equivalent to Applicant's transmitting the converted data over the network comprises transmitting images over the network).

7. Claim 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura (U.S. Application 2002/0013857) in view of Koch et al. (U.S. Patent 5,628,319, hereafter "Koch") as applied to claim 1 above, and further in view of 1, and further in view of Norris et al. (U.S. Patent 5,920,828, hereafter "Norris").

As per claim 6, the combined teaching of Koch and Kitamura references teaches steps of managing NDE test data as previously described in claim 1 rejection.

The combined teaching does not specifically teach "locating the converted NDE test data on the first computer database using a cataloging server", although Kitamura teaches storing captured image data in the internal storage device at Page 1, [0004].

However, Norris teaches using a central database and tape catalog server to gather, process and locate seismic test data in Fig. 1 and col. 10, lines 14-17.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Norris with the Koch and Kitamura references because the references are dedicated to non-destructive testing, testing process, testing data conversion, and testing data collection and display, and further combined teaching would have equipped the system with a central relational database and cataloger for maintaining integrity and enhancing processing capabilities.

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As per claim 7, the combined teaching of Norris, Koch and Kitamura references further teaches "locating the converted NDE test data comprises locating an image" (See Kitamura: Page 1, [0004] where captured image data is temporary stored in the internal storage device, and Norris: col. 10, lines 22-25 wherein Norris' seismic data files are indexed and cataloged and located is equivalent to the Applicant's locating the converted NDE test data comprises locating an image).

- 8. The prior art made of record
  - B. U.S. Patent 5,628,319
  - E. U.S. Patent 6,511,426
  - F. U.S. Patent 5,920,828
  - G. U.S. Application 2002/0013857

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- A. U.S. Patent 6,721,676
- C. U.S. Patent 6,499,125
- D. U.S. Patent 6,018,713

## Response to Arguments

**9.** Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

#### Contact Information

**10.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S Lu whose telephone number is (571) 272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's Supervisor, Jean R. Homere, Esq. can be reached on (571) 272-3780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

Kuen S. Lu

Patent Examiner

January 8, 2006